

Reply to Office Action of 11/02/2005
Amendment Dated: January 27, 2006

Appl. No.: 09/824,844
Attorney Docket No.: CSCO-007/3484

REMARKS

Claims 1-45 were examined in the outstanding office action mailed on 11/02/2005 (hereafter "Outstanding Office Action"). The rejection of claims 1 -3, 5-19, 21 -28, 30-43, and 45 under 35 U.S.C. 103(a) as being unpatentable over Barrett (2003/0135644) in view of Wang et al. (US 6,538,997), was maintained by stating that the affidavits submitted under 37 CFR § 131 were inadequate. In addition, the rejection of claims 1-7, 9-13, 17-22, 26-32, 39, 42, and 44 under 35 U.S.C. 103(a) as being unpatentable over Wang *et al* (US 6,538,997) in view of Welcher ("Discovering Cisco Discovery Protocol"), was also maintained. Claims 30, 31, and 33 were objected to, and claim 2 was rejected under 35 U.S.C. § 112.

In response, another affidavit from the undersigned representative is submitted accompanying the present response. Claims 2, 12, 14, 21, 23, 30, 31 33, 35 and 39 are sought to be amended, and claims 13, 22 and 36 are sought to be canceled. The amendments and cancellations are believed not to introduce new matter, and their entry is respectfully requested. Applicants again thank the Examiner for the detailed examination and numerous valuable suggestions. Withdrawal of the rejections and objections is respectfully requested further in view of the following remarks.

Email Communications

The undersigned representative had sent an email communication dated January 18 2006 to Examiner Strange attaching a proposed affidavit, which substantially parallels the affidavit accompanying the present response. In response, Applicant received an email from the Examiner on the same day containing the following text in relevant parts:

I briefly looked at the attached documents, and they appear to be pretty good. While I cannot guarantee that they will be sufficient without further examination and consultation with our affidavit specialists, I would say that it is very likely that they will be sufficient to account for the time period from 2/1/01 to 3/6/01.

As a courtesy, I would like to remind you that the Wang reference is not subject to

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removal based on a successful affidavit, so be sure to address that reference in any response. If I remember correctly, there were some dependent claims that were not rejected under Wang, so you may want to consider incorporating subject matter from those claims into the independent claims.

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If you would like to call me for any reason, I am typically at my office by 8:15-8:30AM Eastern time M-F.

Applicants and the undersigned representative thank the Examiner for the prompt response, as well as for the courtesy of notes regarding the Wang reference. The applicant is believed to have met the burden of making of record the Substance of the Interview/email communication. See MPEP 713.04 for further clarification.

Affidavits

In Page 2, point number 3, the Examiner had noted that the evidence submitted is sufficient to establish a conception of the invention prior to the effective date of the Barrett Reference (1/24/2001), the Examiner is thanked for the same.

With respect to diligence, in pages 2 and 3, point number 4, the Examiner had requested additional details with respect to the time period between February 1 2001 and March 6 2001. In response, another affidavit along with Exhibit F as additional evidence. Diligence is believed to be established at least in view of the new evidence presented.

Removal of the Barrett reference as prior art is respectfully requested.

Applicants now address the various objections and rejections raised by the Examiner in the corresponding section of the Outstanding Office Action.

Claim Objections

Claims 30, 31 and 33 were objected to noting that each claim recites, "The computer readable medium...further comprising", but then lists the steps of a method. The

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Examiner further recommended that the claims be amended to recite "The computer readable medium...further comprising one or more sequences of instructions for". Each claim is sought to be amended accordingly. Withdrawal of the objections with respect to claims 31, 31 and 33 is respectfully requested.

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Claim Rejections 35 U.S.C. § 112

With respect to claims 5 and 30 rejected in point 17 page 7, each claim is sought to be amended to recite "performed by said receiving device" as recommended by the Examiner. The Examiner is thanked for the recommendation and withdrawal of the rejection is respectfully requested.

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With respect to claim 8 rejected in point 18 page 7, it is noted that claim 8 depends from claim 5, which has been amended to depend from claim 5. Claim 5 recites 'a receiving device' providing the necessary antecedent basis for claim 8. Withdrawal of the rejection with respect to claim 8 (and also dependent claim 9) is respectfully requested.

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With respect to claim 32 rejected in point 18 page 7, the claim is sought to be amended to depend from claim 30, which recites 'a receiving device' providing the necessary antecedent basis for claim 32. Withdrawal of the rejection with respect to claim 32 (and also dependent claim 9) is respectfully requested.

All the rejections under 35 U.S.C. § 112 are thus believed to be addressed.

Rejections Under 35 U.S.C. § 103

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In page 3 point 6 of the Outstanding Office Action, it was stated that:

6. With regard to claims 1 and 12, and Applicant's assertion that "There is no disclosure or suggestion in Wang for intermediate nodes to send corresponding responses back to a single receiving device" (Page 25, Lines 18-20 of Remarks), the Examiner respectfully disagrees. *Wang clearly discloses that*

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intermediate nodes may send corresponding responses back to the receiving device (Col 7, Lines 40-49). In the cited section, Wang discloses that "each bridge/switch/router visited returns its own response segment".
(Page 3, point 6 of the Office Action Mailed 11/02/05, *Emphasis Added*)

5 Applicants respectfully disagree. First, the portion of Wang recited by the Examiner is repeated below:

As a result of a destination being a host which has not implemented layer-2 trace, the trace requester *may never hear a response to its trace request. If, after several*
10 *retries, no response is forthcoming, layer-2 trace is set into a mode of operation (using a command line flag) which may be called a ripple search, whereby each bridge/switch/router visited returns its own response segment before forwarding the trace request.* Thus, during a ripple search, each trace response contains just a single response segment. In an alternative embodiment, the expanding ring search is used in such a situation.

15 (Col 7, lines 40-49 of Wang, *Emphasis Added*)

In other words, Wang teaches the use of a ripple search when a trace requester does hear a response of its trace request. In the ripple search, each bridge/switch/router visited returns its own response segment before forwarding the trace request.

The above teaching do not anticipate at least the feature of, "... repeating by said
20 receiving device said sending and receiving by using said subsequent layer-2 device in the place of said present layer-2 device until said response packet indicates that said second system is directly connected to said present layer-2 device.", which is recited in claim 1.

Accordingly previously presented independent claim 1 is allowable over Wang. Independent claims 17 and 26 are also allowable over Wang at least for similar reasons.

25 Amended independent claim 12 is also allowable over Wang. Amended independent claim 12 recites in relevant parts:

12 (Currently Amended): A method of supporting the tracing of a route containing a sequence of layer-2 devices between a first system and a second system, said method being performed in a layer-2 device forming a part of a

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network, said method comprising:

receiving in said layer-2 device a request packet from a central device, said request packet containing an identifier for said second system, wherein said request packet requests information on whether said second system is connected directly to said layer-2 device;

determining in said layer-2 device whether said layer-2 device is connected directly to said second system;

identifying in said layer-2 device a next device if said layer-2 device is not connected directly to said second system, wherein said next device is next to said layer-2 device in a route from said first system to said second system;

generating in said layer-2 device a response packet, wherein said response packet indicates whether said second system is connected directly to said layer-2 device, said *response packet including data identifying said next device in said response packet if said second system is not connected directly to said layer-2 device*; and

sending from said layer-2 device to said central device said response packet irrespective of whether said central device is in said route or whether said layer-2 device is a last device in said route,

whereby said central device uses said data identifying said next device to determine said sequence of layer-2 devices.

(Currently amended independent claim 12, *Emphasis Added*)

Wang does not disclose or suggest at least the features of the emphasized language.

In support of such a position, the Examiner is respectfully pointed to Col 8 line 63 - Col 9line 56 and Figures 6A and 6B of Wang.

Accordingly currently amended independent claim 12 is also allowable over the art of record. Currently amended independent claims 21, 35 and 39 are also allowable over the art of record for similar reasons.

Thus, all independent claims presented for consideration are believed to be allowable over the art of record. The dependent claims are also allowable at least as depending from an allowable base claim.

Conclusion

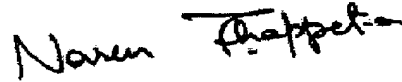
Thus, all the objections and rejections are believed to be overcome, at least in view of the above amendments and remarks, and that all the presented claims are in condition

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for allowance over the art of record. The Examiner is invited to telephone the undersigned representative if it is believed that an interview might be useful for any reason.

Respectfully submitted,



Date: January 27, 2006

Narendra Reddy Thappeta
Attorney for Applicant
Registration Number: 41,416